

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,

LOS ANGELES REGION  
320 W. 4<sup>TH</sup> STREET  
SUITE 200  
LOS ANGELES, CA 90013

**FACT SHEET**

SUPPORTING THE  
AMENDMENTS TO THE LOS ANGELES COUNTY  
MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT  
(ORDER NO. 01-182 AS AMENDED BY ORDER NO. R4-2006-0074;  
NPDES PERMIT NO. CAS004001) TO  
INCORPORATE SUMMER DRY WEATHER WASTE LOAD  
ALLOCATIONS FOR BACTERIA PURSUANT TO THE  
MARINA DEL REY HARBOR MOTHERS' BEACH AND BACK BASINS  
BACTERIA TMDL

**Summary of Proposed Action**

The Los Angeles Regional Water Quality Control Board (LA Water Board) staff proposes a limited reopening of the LA County Municipal Separate Storm Sewer System (MS4) Permit to incorporate the Marina del Rey Harbor Mothers' Beach<sup>1</sup> and Back Basins Bacteria (MDR Bacteria) Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for summer dry weather discharges from MS4 outfalls to Marina del Rey Harbor (MDRH). The LA Water Board adopted the MDR Bacteria TMDL in 2003 Resolution No. 2003-012. This TMDL was subsequently approved by the State Water Resources Control Board Resolution No. 2003-0072, Office of Administrative Law, and the United States Environmental Protection Agency and became effective on March 18, 2004. This TMDL required compliance with the summer dry weather WLAs and winter dry weather WLAs by March 18, 2007. The compliance deadline for the wet weather

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<sup>1</sup> Mothers' Beach is referred to as Marina Beach in the *Marina del Rey Harbor Mothers' Beach and Back Basins Bacterial TMDL Coordinated Monitoring Plan* and the *Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL Dry- and Wet-Weather Implementation Plan*.

WLAs is March 18, 2014 or if an integrated water resources approach is implemented then the compliance deadline is no later than July 15, 2021.

The WLAs for winter dry weather discharges from MS4 outfalls to MDRH will not be incorporated into the MS4 permit at this time. The Regional Board will be reconsidering the MDR Bacteria TMDL in the fall of 2007. The Regional Board expects to reconsider the allowable exceedances days during winter dry weather and wet weather based on a re-evaluation of site-specific variability; the reference system selected to calculate allowable exceedance levels; and the reference year selected to calculate the allowable exceedance days. Based on this reconsideration the winter dry weather WLAs may be revised. Therefore, it is not prudent to incorporate the winter dry weather WLAs into the MS4 Permit at this time.

The summer dry weather period (April 1 to October 31) is the highest period of beach use. A recent study estimated that there is a substantial economic and public health cost associated with swimming in waters contaminated with bacteria (*Regional Public Health Cost Estimates of Contaminated Coastal Waters: A Case Study of Gastroenteritis at Southern California Beaches*, Given S., L.H. Pendelton, and A.B. Boehm. *Env. Sci. Technol.* (2006)). The MDR Bacteria summer dry weather WLAs will be incorporated as receiving water limitations and a supporting prohibition on discharges that are inconsistent with the limits. The LA County MS4 Permit already prohibits discharges that cause or contribute to the exceedance of water quality standards. The proposed changes make more specific the permit provisions, as they relate to discharges of bacteria that could affect Mothers' Beach and the back basins of Marina del Rey Harbor during summer dry weather. The proposed changes will make the MDR Bacteria summer dry weather WLAs a provision of the LA County MS4 Permit.

The proposed changes will affect the County of Los Angeles, the Los Angeles County Flood Control District, and the Cities of Los Angeles and Culver City. The California Department of Transportation (Caltrans) owns or operates storm drains that discharge or are tributary to Marina del Rey Harbor. Therefore, Caltrans is also subject to the MDR Bacteria summer dry weather WLAs. Caltrans MS4 discharges are covered by a statewide storm water discharge permit (NPDES No. CAS000003) issued by the State

Water Board, which expired on July 15, 2004. The LA Water Board will notify the State Water Board that it will need to incorporate all adopted TMDL WLAs for the LA Region that apply to Caltrans when the storm water permit is reissued, and to include provisions to ensure compliance, including the prohibition against the discharge of bacteria in excess of water quality objectives for protection of REC-1 to Mothers' Beach and Basins D, E and F in Marina del Rey Harbor during summer dry weather.

On September 14, 2006, the LA Water Board amended the LA County MS4 Permit to incorporate the Santa Monica Bay (SMB) Beaches Bacteria TMDL WLAs for summer dry weather. Although the Marina del Rey Watershed is a subwatershed of the Santa Monica Bay Watershed, there are separate Bacteria TMDLs for each because of MDRH's unique characteristics as an enclosed bay. However, all of the responsible agencies under the MDR Bacteria TMDL are also responsible agencies under the SMB Beaches Bacteria TMDL. The proposed action is identical to the Board's previous action to incorporate the SMB Beaches Bacteria summer dry weather WLAs into the LA County MS4 Permit; it simply extends the provisions to the MDR Watershed.

The reopener provisions in Part 6.I.1 identify the authority and procedures for the Board to modify the permit. The proposed consideration by the LA Water Board to incorporate the MDR Bacteria TMDL summer dry weather WLAs complies with these provisions. The MDR Bacteria TMDL requires compliance with the summer dry weather WLAs by April 1, 2007. This limited reopener of the MS4 Permit to incorporate the summer dry weather WLAs allows the timely enforcement of these WLAs during the summer months, when beach usage is at its highest and the risk to public health from non-compliance with the WLAs is greatest.

The LA Water Board staff is proposing a limited reopener instead of reissuing the MS4 Permit at this time in order to expedite the inclusion of the MDR Bacteria summer dry weather WLAs, and ensure that the TMDL's terms are enforced as required by the Basin Plan's relevant provisions. Presently, the format of the LA Water Board's MS4 permit is being redesigned. The new format is being vetted in the Ventura County Municipal Storm Water NPDES Permit (Board Order No. 00-108; NPDES Permit No. CAS004002), which is currently in the process of reissuance. The Los Angeles MS4

Permit will be reissued following the Ventura Permit. That will not occur until 2008, and therefore, waiting until permit reissuance would prevent implementation of the TMDL's regulatory requirements until more than a year after compliance is to occur. Moreover, the permit modification does not impose requirements on any new agencies, but only makes requirements that are already applicable to some of the Permittees for SMB Beaches discharges, equally applicable to those agencies' discharges to MDRH. Therefore, the LA Water Board is reopening the existing permit during its administrative extension, instead of reissuing the permit at this time.

### **Statutory History**

The federal Clean Water Act (CWA) generally prohibits the "discharge of any pollutant," 33 U.S.C. § 1311(a), from a "point source" into the navigable waters of the United States. 33 U.S.C. § 1362(12)(A). An entity can, however, obtain a National Pollutant Discharge Elimination System (NPDES) permit that allows conditionally for the discharge of some pollutants. 33 U.S.C. § 1342(a)(1). The CWA defines point sources as "discernible, confined and discrete conveyances, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure" such as a pipe, ditch, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. 33 U.S.C. § 1362; 40 CFR 122.2.

In 1987, the U.S. Congress enacted the Water Quality Act recognizing both the environmental threats posed by storm water runoff and the U.S. EPA's problems in implementing regulations for storm water discharges (NRDC II, 966 F.2d at 1296). These Amendments to the CWA established new statutory requirements to control industrial and municipal storm water discharges to waters of the United States (CWA § 402(p).)

The amendments require NPDES permits for storm water discharges from Municipal Separate Storm Sewer Systems (MS4s) to waters of the United States, and the MS4 was designated a "point source". The storm water discharge permits for MS4s (i) may

be issued on a system- or jurisdiction-wide basis; (ii) shall include a requirement to effectively prohibit [unauthorized] non-storm water discharges into the storm sewers; and (iii) shall require controls to reduce the discharge of pollutants from storm water to the maximum extent practicable, including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. (See CWA §402(p) (3) (B)).

Ordinarily, an NPDES permit imposes [numerical] effluent limitations on such discharges. See 33 U.S.C. § 1342(a)(1) (incorporating effluent limitations found in 33 U.S.C. § 1311). First, a permit-holder “shall . . . achiev[e] . . . effluent limitations . . . which shall require the application of the best practicable control technology [BPT] currently available.” 33 U.S.C. § 1311(b)(1)(A). Second, a permit-holder “shall . . . achiev[e] . . . any more stringent limitation, including those necessary to meet water quality standards, treatment standards or schedules of compliance, established pursuant to any State law or regulations (under authority preserved by section 1370 of this title).” 33 U.S.C. § 1311(b)(1)(C). In the case of MS4 NPDES discharge permits, federal courts have ruled that the U.S. EPA has the discretionary authority under “33 U.S.C. § 1342(p)(2)(E) to determine that ensuring strict compliance with state water-quality standards is necessary to control pollutants, or to require less than strict compliance with state water-quality standards, such as a BMP approach” (*Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9<sup>th</sup> Cir., 1999)). Under 33 U.S.C. § 1342(p)(3)(B)(iii), the U.S. EPA has the choice to include either best management practices or numeric limitations in the permits. NRDC II, 966 F.2d at 1308 (“Congress did not mandate a minimum standards approach or specify that [the] EPA develop minimal performance requirements.”).

## **Regulatory Scheme**

On November 16, 1990, pursuant to CWA § 402(p), the U.S. EPA promulgated regulations at 40 CFR 122.26 which established requirements for storm water discharges under the NPDES program. The U.S. EPA defines storm water at 40 CFR

122.26 (b)(13) as 'storm water runoff, snow melt runoff, and surface runoff and drainage' [related to storm events or snow melt] (55 Fed. Reg. 47990, 47995). Non-storm water discharges to the MS4 are to be "effectively prohibited" by the MS4 operator. "Effective prohibition" meant that the MS4 Permittee was to implement programs to eliminate "illicit discharges" to the storm drain system unless authorized under NPDES permits issued independent of the MS4 permit (55 Fed. Reg. 47995). The storm water regulations also intended not to hold MS4 Permittees responsible for certain categories of non-storm water discharges, such as uncontaminated ground water infiltration, natural springs, rising groundwater, stream and diversions, from the MS4. Such discharges might need to be addressed under independent NPDES permits when specifically identified on a case-by case basis by the MS4 Permittee or the permitting authority.

The U.S. EPA intended that storm water discharges from the MS4 be primarily addressed through the implementation of BMPs on an iterative approach because of the intermittent and variable nature of storm flows and pollutant concentrations as well as insufficient data rather than numerical effluent limitations (61 FR 43761). However, the U.S. EPA's scheme for non-storm water discharges from the MS4 is to bring them under the existing framework of the NPDES program at 40 CFR 122.44(d). (55 Fed. Reg. 47995). Non-numerical limitations such as BMPs for non-storm water discharges may be authorized only where numerical limits are not feasible (40 CFR 122.44(k)). In any case, if the Permittee fails to implement adequate BMPs to prevent exceedance of the receiving water objectives, the permitting authority "may have to consider other approaches to water quality protection" (61 Fed. Reg. 43761; *Interim Permitting Approach*, Response #6, EPA 833-D-96-00, 1996).

The CWA §303(d)(1)(A) requires each State to conduct a biennial assessment of its waters, and identify those waters that are not achieving water quality standards. The resulting list is referred to as the 303(d) list. The CWA also requires States to establish a priority ranking for waters on the 303(d) list of impaired waters and to develop and implement TMDLs for these waters. A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates the acceptable pollutant load to point and nonpoint sources. The elements of

a TMDL are described in 40 CFR 130.2 and 130.7. A TMDL is defined as “the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background” (40 CFR 130.2). Regulations further require that TMDLs must be set at “levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality” (40 CFR 130.7 (c) (1)). The regulations at 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. The U.S. EPA has issued guidance for establishing WLAs for storm water discharges in TMDLs and their incorporation as numerical limitations in MS4 Storm Water Permits (U.S. EPA Office of Water Memo, *Establishing Total Maximum Daily Load Wasteload Allocations for Storm Water Sources and NPDES Permit Requirements Based on those WLAs*, Nov 22, 2002 Memo).

Since provisions in NPDES permits must reflect the assumptions and requirements of available TMDLs (40 CFR 122.44 (d)(1)(vii)(B)), the NPDES permit must incorporate the WLAs as either BMPs (reasonably expected to achieve the WLAs when implemented and properly maintained), under specified circumstances (40 CFR 122.44(k)(2) & (3)), or as a Water Quality Based Limitation (WQBEL) expressed numerically. Where a non-numeric effluent limitation is selected, the permit’s administrative record must support the expectation that the BMPs are sufficient to achieve the WLAs. (40 CFR 124.8, 124.9, and 124.18.) The guidance, however, does not address non-storm water discharges from an MS4.

### **State Regulatory Authority and Permit History**

The State of California is one of forty-five States with duly delegated authority under the CWA to implement the NPDES permitting program. The Porter-Cologne Water Quality Control Act (California Water Code) authorizes the State Board, through the nine regional boards, to issue NPDES permits, and regulate and control the discharge of pollutants into waters of the State. To comply with the CWA, the Los Angeles Regional Water Board (LA Water Board) issued the first storm water permit (“predecessor

permit”) on June 18, 1990, to the municipalities (Permittees) in Los Angeles County (Order No. 90-079; NPDES Permit No. CA0061654). The LA County MS4 Permit was reissued in 1996, and the current iteration of the permit was adopted on December 13, 2001 (Order No. 01-182; NPDES Permit No. CAS004001).

On June 12, 2006, a Report of Waste Discharge was submitted as the Los Angeles County Municipal Stormwater application for renewal of waste discharge requirements adopted in Order 01-182. On September 14, 2006, the LA County MS4 Permit (Order No. 01-182) was amended by Order No. R4-2006-0074. Order No. 01-182 as amended by Order R4-2006-0074 expired on December 12, 2006. Pursuant to 40 CFR 122.6, Order 01-182 as amended by Order R4-2006-0074 will remain in effect and enforceable until a replacement LA County MS4 Permit is adopted by the LA Water Board.

Because of the complexity and networking of the storm drain system and drainage facilities within and tributary to the County of Los Angeles, the LA Water Board adopted a countywide approach in permitting storm water and urban runoff discharges. The permit requires Permittees to conduct monitoring and to implement programs in the areas of public involvement and participation, industrial/commercial inspection, development planning, development construction, public agency activities, and to reduce the discharge of pollutants in storm water to the Maximum Extent Practicable (MEP) from the permitted areas in the County of Los Angeles to the waters of the U.S. In addition, Permittees are required to effectively prohibit the discharge of unauthorized non-storm water into the MS4 by implementing a program to detect and eliminate illicit discharges/illicit connections to the MS4.

The LA County MS4 Permit requires Permittees to develop, and implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water to the Maximum Extent Practicable (MEP) to the waters of the U.S. In addition, it states that discharges from the MS4 to waters of the U.S. (which includes Marina del Rey Harbor) are required to meet water quality standards. Upon establishment of TMDLs by the State or the U.S. EPA, the State is required to incorporate the TMDLs into the State Water Quality Management Plan (40 CFR 130.6 (c) (1), 130.7). The Water Quality Control Plan for the Los Angeles Region

(Basin Plan), and applicable statewide plans, serves as the State Water Quality Management Plan governing the watersheds under the jurisdiction of the LA Water Board. LA Water Board-issued NPDES permits must contain provisions consistent with the State Water Quality Management Plan.

### **TMDL History**

The LA Water Board adopted the MDR Bacteria TMDL, including WLAs, to address documented bacteriological water quality impairments at Mothers' Beach and Basins D, E, and F in Marina del Rey Harbor. The WLAs for bacteria during summer dry weather (April 1 to October 31) for the LA County MS4 Permittees that discharge to Marina del Rey Harbor are set at zero allowable exceedance days of the single sample bacteria objectives at each sampling location for the protection of public health. The WLAs, expressed as exceedance days of the single sample bacteria objectives, for each sampling location during winter dry weather (November 1 to March 31) are specified in Basin Plan Table 7-5.2. No exceedances of the geometric mean bacteria objectives are allowed during summer or winter dry weather under the MDR Bacteria TMDL. Winter dry weather bacteria WLAs are not considered for inclusion at this time because of the pending reconsideration of the MDR Bacteria TMDL, which is scheduled to take place in the fall of 2007. Dry weather is defined in the TMDL as those days with less than 0.1 inch of rainfall, and more than three days after a rain day (consistent with the 72-hour period used by the County Department of Health Services to post beaches with rain advisories). The TMDL defines rain days as those days with greater than or equal to 0.1 inch of rainfall. (One-tenth inch of rainfall is the minimum amount of rainfall that will produce runoff and is the smallest unit of measure on standard rain gauges operated by flood management agencies.) Flow from an MS4 outfall to Marina del Rey Harbor on a summer dry weather day is identified as a non-storm water discharge.

The MDR Bacteria TMDLs were adopted to reduce the risk of illness associated with swimming in marine waters contaminated with human sewage and other sources of bacteria. Approximately 200,000 beachgoers visit Mothers' Beach annually and is popular among mothers with children because of the absence of surf tides. In addition,

Marina del Rey Harbor is the homeport for over 5,000 pleasure boats, 6 yacht clubs, and 19 anchorages. Regionally, it has been estimated that between 627,800 and 1,479,200 excess gastrointestinal illness cases may occur annually among swimmers in Los Angeles County and Orange County beaches as a result of enterococci contaminated waters. The corresponding economic loss annually has been estimated to range from \$21 million to \$51 million. (*Regional Public Health Cost Estimates of Contaminated Coastal Waters: A Case Study of Gastroenteritis at Southern California Beaches*, Given S., L.H. Pendelton, and A.B. Boehm. *Env. Sci. Technol.* (2006).)

### **Related State Administrative Actions**

The State Water Board has issued standard receiving water limitations language to be included in municipal storm water permits. (State Board WQO 99-05, which amended WQO 98-01). The State Board affirmed that NPDES storm water permits must prohibit discharges that cause or contribute to violations of water quality standards (See WQ 98-01, at p. 8). The State Water Board had ruled earlier that municipal storm water permits must include effluent limitations necessary to achieve water quality standards (State Board Orders WQ 91-03 and WQ 91-04)<sup>2</sup>, and that these may be non-numerical. Also, Discharge Prohibitions need not be iterative (State Board Order WQ 2001-15, see footnote 18). The State Water Board modified the prohibition in WQO 2001-15, because the plain text in the San Diego County MS4 Permit prohibited the discharge of storm water containing pollutants exceeding water quality standards to the MS4, not non-storm water discharges. The discharge of non-storm waters to waters of the U.S. from an MS4 must strictly comply with 33 U.S.C. § 1311(b)(1)(C).

Even if the Water Boards were to allow for an iterative adaptive approach for storm water and non-storm water dischargers to comply with receiving water limitations, instead of establishing WQBELs or strict discharge prohibitions, it is the Permittees who are ultimately responsible for evaluating and revising BMPs to achieve compliance with

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<sup>2</sup> In Order WQ 91-04, the State Board reviewed a complaint brought by the environmental community that the 1990 LA County MS4 Permit lacked numerical effluent limits and violated federal law.

water quality standards in an iterative manner. The Water Boards have no affirmative obligation to notify MS4 Permittees that they are in violation of permit provisions, for them to initiate corrective action to remedy exceedances of water quality standards.

In September 2005, the State Water Board convened an expert panel to make findings and recommendations on the feasibility of including numerical effluent limitations in storm water discharge permits, including MS4 permits. The panel issued a report titled, *The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities* (June 2006). The panel concluded that it was not feasible to set enforceable numeric effluent criteria for municipal storm water discharges or storm water BMPs at this time. Nevertheless, the panel recommends an interim approach using action levels based either on consensus, or ranked percentile distributions, or statistically derived population parametrics. The panel neither deliberated nor made any determination on how non-storm water discharges from MS4s that adversely affect receiving waters are to be addressed in storm water permits. While the State Water Board has convened workshops to discuss the panel's report, the State Board has not yet taken any action on the report. Again, this panel's report does not address non-storm water discharges from point sources like the MS4.

### **Implementation under the MS4 Permit through the IC/IDE Program**

LA County MS4 Permittees have been implementing an illicit connections/illicit discharges elimination (IC/IDE) program over nearly three permit terms (1990 – present) and have been accorded ample opportunity to eliminate unauthorized non-storm water discharges from the MS4 that are causing or contributing to the exceedance of a water quality objective, or to require operators of such discharges to be permitted through the Water Board's NPDES program. In 2001, the LA Water Board revised its single sample and geometric mean water quality objectives for bacteria to reflect U.S. EPA recommended criteria and the findings of a peer-reviewed local

epidemiological study (Regional Board Resolution 2001-018)<sup>3</sup> and Permittees should have revised their IC/IDE programs to eliminate the bacteria exceedances. However, very few Permittees have made changes to their Storm Water Quality Management Programs in response to exceedances of bacteria standards at SMB beaches and MDRH. A review of the three most recent Annual Program Reports (2003-2004, 2004-2005, and 2005-2006) for Permittees discharging to Santa Monica Bay and MDRH reveals that the primary mechanism for IC/IDE is a reactive program based on reported or discovered illicit discharges. Although the municipal response to reported or discovered illicit discharges appears to be effective in all the documented cases, there is a potential deficiency in identifying illicit connections. Less than half of the programs reviewed conducted illicit connection screening during the 2003/2004, 2004/2005 and 2005/2006 fiscal years. Further, the majority of the Permittees that conducted illicit connection screening examined only a small portion of their storm drain system. The review of the IC/IDE programs shows that while municipal response appears to be effective in eliminating reported or discovered illicit connections/illicit discharges, overall a proactive approach in preventing illicit connections is lacking.

Of the permittees in the MDRH Watershed, the County of Los Angeles screened approximately 30% of their closed storm drain system during the 2003/2004 and 2005/2006 fiscal years and approximately 20% during the 2004/2005 fiscal year for illicit connections. The City of Los Angeles did not report the length of closed storm drain pipes that were screened for illicit connections. The City of Culver City did not conduct illicit connection screening during the 2003/2004 fiscal year. During the 2004/2005 and 2005/2006 fiscal years Culver City screened 100% of their closed storm drain system for illicit connections. It is unknown whether the screened portions of the Los Angeles County and Culver City storm drain systems are within the MDRH Watershed. Furthermore, dry weather discharges from the MS4 continue to cause violations of bacterial water quality standards at Marina del Rey Harbor Basins D, E, and F.

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<sup>3</sup> As far back as the 1994 update, the Basin Plan included single sample and geometric mean water quality objectives for a subset of the fecal indicator bacteria included in the 2001 amendments.

## **Implementation under the MDR Bacteria TMDL**

The MS4 permittees in the MDR Watershed have already begun taking actions to reduce bacteria impairments in MDRH, including at Mothers' Beach. Technical options for compliance with the dry weather WLAs for MDRH have been previously analyzed by the Permittees (Marina del Rey Harbor Mother's Beach and Back Basins Bacteria TMDL Dry- and Wet-Weather Implementation Plan (January 2007); Santa Monica Bay Beaches Bacteria TMDL Implementation Plan for Jurisdictional Groups 2 and 3, (Feb 2005)). Potential solutions include (i) institutional controls (non-structural source controls) such as public education and restaurant inspections; (ii) sub-regional (distributed or decentralized) controls such as small-scale infiltration and limited treatment; (iii) regional controls such as capture, storage and treatment systems or constructed wetlands; and (iv) low-flow diversion to waste water treatment plants. The LA County MS4 Permittees within the MDR Watershed have already submitted an Implementation Plan, to achieve the MDR Bacteria TMDL, for the LA Water Board's review. In April of 2006, the Board reviewed and acknowledged support for this plan under Resolution 2006-009.

## **State Grants and Bond Funds for Implementation**

The State Water Board and the LA Regional Water Board have funded a total of 27 projects costing \$18.7 million within the Santa Monica Bay Watershed, of which the MDR Watershed is a part, to address bacterial contamination. Accordingly, some of the monies granted to the SMB Watershed are directed toward MDRH projects. Six of these projects worth \$3.5 million dollars are for the treatment of bacteria or pathogens as the primary pollutant. In addition, there are twenty-one Clean Beach Initiative (CBI) Projects worth \$15.1 million, primarily dry-weather diversion projects, within the Santa Monica Bay. These projects are managed by the State Water Board and are for bacteria reduction. Most of the projects are underway and are at various stages of completion. Similarly, the Santa Monica Bay Restoration Commission (SMBRC) has issued grant funds of about \$5.8 million for 16 projects to treat dry weather flows to Santa Monica Bay, eight of which have been completed.

Within the MDR Watershed, the Marina Beach Water Quality Improvement Project received \$2 million as a CBI Project to increase the water circulation at Marina (Mothers') Beach and to divert sheet flow from Basin D. The circulation phase of the project was completed in October 2006. In addition, the SMBRC provided \$200,000 through Proposition 50 for the Boone-Olive Plant low-flow diversion project, which was completed in December 2006.

### **Opportunity for Public Comment**

The notice of the LA Water Board's proceedings to incorporate the MDR Bacteria TMDL summer dry weather WLAs into the LA County MS4 Permit was circulated on May 11, 2007, which requested comments by June 25, 2007. It stated that the Board would consider the action at its July 12, 2007, Board meeting.

### **Options Considered**

The LA Water Board staff considered the following alternatives for making enforceable the MDR Bacteria TMDL summer dry weather WLAs for MS4 non-storm water discharges.

a. MS4 Storm Water Quality Management Program (SQMP) – An MS4 Storm Water Permittee's SQMP is its primary documentation for utilizing the iterative adaptive approach using BMPs or other methods to manage the quality of storm water discharges in order to comply with receiving water limitations. In contrast, non-storm water discharges are to be prohibited under federal storm water regulations. Therefore, the SQMP should have included an effective Illicit Connection/Illicit Discharge Elimination (IC/IDE) program and other source control measures to eliminate non-storm water discharges to the MS4 or to ensure that they are permitted through the Water Board's NPDES program. MS4 Permittees in the MDR Watershed have had more than a decade and a half to effectively implement this provision. The fact that MS4 non-storm water discharges to Marina del Rey Harbor still cause or contribute to exceedances of bacteria receiving water limitations, and that the LA Water Board adopted dry weather WLAs for Mothers' Beach and Basins D, E and F of Marina del

Rey Harbor in 2003 demonstrates the need for greater action and strict enforcement of the WLAs. Permittees have never taken the initiative to submit a Receiving Water Limits Compliance Report, despite recurring exceedances of water quality standards. As noted earlier, few Permittees have documented revisions to the SQMP to address chronic exceedances of water quality standards.

b. MS4 Unauthorized Non-Storm Water Discharge Prohibition – The LA MS4 Permit includes provisions to effectively prohibit unauthorized non-storm water discharges. Permittees may achieve the effective prohibition by implementing other source control measures or an IC/IDE program to remove unauthorized non-storm water discharges or to get them permitted through the Water Board’s NPDES program. Given the fact that the proposed action is limited in scope in that it seeks to prohibit discharges during summer dry weather (non-storm water) from MS4s to Mothers’ Beach and Basins D, E, and F in MDRH and that compliance is determined by receiving water limitations rather than end-of-pipe (i.e., effluent) limitations, it is a reasonable action by the LA Water Board to protect water quality and human health, while considering the burden it imposes on MS4 Permittees in the MDR Watershed. Thus, even if end-of-pipe concentrations exceed receiving water limitations, there is no exceedance unless the discharge causes or contributes to the exceedance of the Receiving Water Limits (RWLs). In essence, the prohibition option does not impose an end-of-pipe water quality based numeric effluent limitation, contrary to arguments raised by many Permittees. Rather, compliance with the bacteria WLAs is determined in the receiving water at the initial point of mixing. New language has been added to the RWLs section to clarify how compliance with the relevant limitations will be determined. Under federal law, when a non-numeric water quality based effluent limit is imposed, the permit’s administrative record, and fact sheet needs to support the approach as sufficient to attain the WLA (See 40 CFR 124.8, 124.9 and 124.18). The LA Water Board’s administrative record adequately supports the proposed approach as being sufficient to meet the MDR Bacteria TMDL summer dry weather WLAs.

c. Combined Non-Storm Water/Storm Water MS4 Permit – An MS4 storm water permit may also cover non-storm water discharges. In that case, both storm water discharges and non-storm water discharges can be included in the same permit (or in multiple

permits). The non-storm water discharges will be subject to the existing regulations promulgated for point source non-storm water discharges at 40 CFR 122.44(d). The MS4 was effectively designated a point source by the U.S. Congress in 1987, and thus the MS4 non-storm water discharges that have a reasonable potential to adversely impair the beneficial uses of receiving waters are subject to the stricter of the CWA BAT/BCT technology based controls or WQBELs. MS4 storm water discharges are subject to the discretionary provisions of CWA § 402(p). This continues to remain an option for the Water Board when regulating MS4 storm water and non-storm water discharges within a single NPDES permit.

d. Separate Individual Permit for MS4 Non-Storm Water Discharges – A separate permit for MS4 non-storm water discharges may be issued, which would require strict compliance with BAT/BCT technology based controls or WQBELs, whichever is more stringent. It is possible that the LA Water Board may elect this approach in the future, as it is required to consider numerical effluent limitations to implement non-storm water WLAs for dry weather non-storm water discharges from the MS4 to enforce the WLAs within the NPDES framework.

e. No Action Option – Given the limited scope of the action, which is to prohibit the discharge to Marina del Rey Harbor of summer dry weather flows containing bacteria in excess of Basin Plan objectives, and the economic and health costs associated with non-action or non-enforcement of the MDR Bacteria summer dry weather WLAs, the proposed action is reasonable and necessary. Furthermore, the MDR Bacteria TMDL required compliance with the summer dry weather WLAs by March 18, 12007, but exceedances continue to occur at Mothers' Beach during summer dry weather. The Regional Board is obligated by federal regulation (40 CFR 122.44(d)) to ensure that NPDES permits are consistent with the assumptions and requirements of any available waste load allocation. Failing to incorporate the summer dry weather bacteria waste load allocations into the permit at this time would be contrary to the federal regulatory purpose of making surface waters 'fishable and swimmable'.

## **Recommended Action**

Given the narrow purpose of the amendments, which is to make the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL summer dry weather WLAs enforceable for discharges from the MS4 staff recommends 'Option b'.

Option b amends the LA County MS4 permit in a limited manner with revisions to Findings; Part 1. Discharge Prohibitions Section; and Part 2. Receiving Water Limitations Section to incorporate the MDR Bacteria summer dry weather WLAs. The changes are the addition of new receiving water limitations for bacteria and a prohibition against non-storm water discharges from the MS4 to MDRH Basins D, E, and F that result in an exceedance of the bacteria receiving water limitations.

This action amending an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (Cal. Public Resources Code § 21100 *et. seq*) in accordance with Cal. Water Code § 13389. Nevertheless, staff considered the environmental impacts that may result from this action by evaluating the fiscal burden associated with eliminating bacteria exceedances at Mothers' Beach and MDR Harbor through various control measures and engineering practices with the economic and health costs associated with continuing exceedance of the beach bacteria standards, and determined that the environmental and public health benefits far outweigh the fiscal burden.

Part 6.I.1 of the permit identifies the limited conditions under which the LA County MS4 permit may be reopened for modification and the procedures to be followed. The procedures for this hearing and the recommended action fully comply with the terms of those permit provisions.